

## WEST Search History





DATE: Tuesday, July 27, 2004

<b>Hide?</b>	<b>Set Name</b>	<b>Query</b>	<b>Hit Count</b>
		<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L1	complementary parallel	332
<input type="checkbox"/>	L2	parallel complementary	513
<input type="checkbox"/>	L3	(l1 and L2) and (nucleic acid or oligonucleotide)	14
<input type="checkbox"/>	L4	(l1 and L2) and (duplex)	5
<input type="checkbox"/>	L5	6420115.pn. or 6403313.pn.	5
<input type="checkbox"/>	L6	L5 and (parallel near\$3 complementary)	0
<input type="checkbox"/>	L7	L5 and (parallel near complementary)	0
<input type="checkbox"/>	L8	L5 and (parallel near complementary)	0
<input type="checkbox"/>	L9	L5 and (parallel)	3
<input type="checkbox"/>	L10	(l1 or L2) same target	29
		<i>DB=USPT; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L11	4220450.pn.	1
		<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L12	6656692.pn.	2
<input type="checkbox"/>	L13	(l1 and L2) and (nucleic acid or oligonucleotide or probe or primer)	14

END OF SEARCH HISTORY

M  
E  
N  
U

## Refine Search

### Search Results -

Term	Documents
OLIGONUCLEOTIDE	70368
OLIGONUCLEOTIDES	59007
(9 AND OLIGONUCLEOTIDE).PGPB,USPT,USOC,EPAB,JPAB,DWPI.	0
(L9 AND OLIGONUCLEOTIDE).PGPB,USPT,USOC,EPAB,JPAB,DWPI.	0

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:

L9 and oligonucleotide

Refine Search

Recall Text

Clear

Interrupt

### Search History

DATE: Tuesday, July 27, 2004   [Printable Copy](#)   [Create Case](#)

#### Set Name Query

side by side

#### Hit Count Set Name

result set

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ

<u>L1</u>	bolli-M\$.in.	30	<u>L1</u>
<u>L2</u>	Huldreich-T\$.in. or leumann-C\$.in.	6	<u>L2</u>
<u>L3</u>	(l1 or l2) and bicyclo-DNA	0	<u>L3</u>
<u>L4</u>	(l1 or l2) and DNA	3	<u>L4</u>
<u>L5</u>	(l1 or l2) and parallel	3	<u>L5</u>
<u>L6</u>	(l1 or l2) and (parallel same complementary)	0	<u>L6</u>
<u>L7</u>	parallel complementary	513	<u>L7</u>
<u>L8</u>	L7 and (DNA or nucleic acid or oligonucleotide or RNA)	44	<u>L8</u>
<u>L9</u>	claude-H\$.in.	166	<u>L9</u>

Double helixes with **parallel** strands are

formed by nuclease-resistant oligo-[ $\alpha$ ]-  
deoxynucleotides and oligo-[ $\alpha$ ]-deoxynucleotides  
covalently linked to an intercalating agent with  
complementary oligo-[ $\beta$ ]-deoxynucleotides

AUTHOR(S) :

Praseuth, Daniele; Chassignol, Marcel; Takasugi,  
Masashi; Doan, Trung Le; Thuong, Nguyen T.; Helene,  
Claude

CORPORATE SOURCE:

Lab. Biophys., INSERM, Paris, 75005, Fr.

SOURCE:

Journal of Molecular Biology (1987), 196(4), 939-42

CODEN: JMOBAK; ISSN: 0022-2836

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Oligo- $\alpha$ -thymidylates were synthesized and covalently linked to an intercalating agent (an acridine derivative) and(or) to a p-azidophenacyl group. These mols. bind to a complementary oligo- $\beta$ -deoxynucleotide. A strong stabilization is obtained by covalent attachment of the acridine derivative at the 5' end of the oligo- $\alpha$ -deoxynucleotide. Upon excitation of the p-azidophenacyl group with UV light, the oligo- $\alpha$ -thymidylate is crosslinked to its target sequence. These crosslinks are converted to chain breaks under alkaline conditions. This allows an unambiguous assignment of the orientation of the 2 oligonucleotide chains. As expected,  $\beta$ - $\beta$  hybrids have an antiparallel orientation, whereas the 2 chains of  $\alpha$ - $\beta$  hybrids are **parallel** independently of whether an intercalating agent is covalently linked to the **.alpha.-oligonucleotide**. Oligo- $\alpha$ -thymidylates covalently linked to an acridine derivative are highly resistant to endo- and exonucleases. Therefore, they could be used as anti-messengers to block mRNA translation in vivo under conditions where oligo- $\beta$ -deoxynucleotides are usually hydrolyzed.

=>

Sequence-specific recognition, photocrosslinking and  
cleavage of the DNA double helix by an  
oligo- $[\alpha]$ -thymidylate covalently linked to an  
azidoproflavine derivative

AUTHOR(S): Trung Le Doan; Perrouault, Loic; Praseuth, Daniele;  
Habhouh, Noureddine; Decout, Jean Luc; Nguyen Thanh  
Thuong; Lhomme, Jean; Helene, Claude

CORPORATE SOURCE: Lab. Biophys., Museum Natl. Hist. Nat., Paris, 75005,  
Fr.

SOURCE: Nucleic Acids Research (1987), 15(19), 7749-60  
CODEN: NARHAD; ISSN: 0305-1048

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A 3-azidoproflavine derivative was covalently linked to the 5'-end of an octathymidylate synthesized with the  $\alpha$ -anomers of the nucleoside. Two target nucleic acids were used for this substituted oligo( $\alpha$ -thymidylate): a 27-mer single-stranded DNA fragment containing an octadeoxyadenylate sequence and a 27-mer duplex containing 8 contiguous A·T base pairs with all adenines on the same strand. Upon visible light irradiation the octa- $[\alpha]$ -thymidylate was photocrosslinked to the single-stranded 27-mer. Chain breaks were induced at the crosslinked sites upon piperidine treatment. From the location of the cleavage sites on the 27-mer sequence it was concluded that a triple helix was formed by the azidoproflavine-substituted oligo- $[\alpha]$ -thymidylate with its complementary oligodeoxyadenylate sequence. When the 27-mer duplex was used as a substrate, cleavage sites were observed on both strands after piperidine treatment of the irradiated sample. They were located at well defined positions which indicated that the octathymidylate was bound to the (dA)8·(dT)8 sequence in a **parallel** orientation with respect to the (dA)8-containing strand. Specific binding of the  $[\alpha]$ -octathymidylate involved local triple strand formation with the duplex (dA)8·(dT)8 sequence. Thus, it is possible to synthesize sequence-specific mols. which specifically bind oligopurine-oligopyrimidine sequences in double-stranded DNA via recognition of the major groove H bonding sites of the purines.

mparative activity of alpha- and beta-anomeric  
oligonucleotides on rabbit beta globin synthesis:  
inhibitory effect of cap targeted **alpha-**  
**oligonucleotides**.

COMMENT: Erratum in: Biochem Biophys Res Commun 1989 Dec  
29;165(3):1443

AUTHOR: Bertrand J R; Rayner B; Imbach J L; Paoletti C; Malvy C

CORPORATE SOURCE: UA 147 CNRS, U 140 INSERM, Institut Gustave Roussy,  
Villejuif, France.

SOURCE: Biochemical and biophysical research communications, (1989  
Oct 16) 164 (1) 311-8.  
Journal code: 0372516. ISSN: 0006-291X.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198911

ENTRY DATE: Entered STN: 19900328  
Last Updated on STN: 19900328  
Entered Medline: 19891120

AB Alpha-anomeric oligonucleotides are resistant to nucleases and display  
**parallel** annealing to RNA complementary sequences. We compared  
the effect of alpha- and beta-oligonucleotides targeted against various  
mRNA regions on the rabbit beta globin in vitro synthesis. In order to  
determine the role of RNase H, experiments were performed in both rabbit  
reticulocyte lysate and wheat germ extract. As expected  
beta-oligonucleotides were found more efficient in wheat germ extract  
which is rich in RNase H activity and **alpha-**  
**oligonucleotide** targeted against the initiation codon or  
downstream had no effect because they do not induce mRNA cleavage by RNase  
H. However, we report, for the first time, a specific translation  
inhibition by **alpha-oligonucleotides**. This occurs  
provided they are targeted against the cap region in 5' of the mRNA.

PubMed ID: 9461474

TITLE: alpha-Oligodeoxyribonucleotide N3'-->P5' phosphoramidates: synthesis and duplex formation.  
AUTHOR: Pongracz K; Gryaznov S M  
CORPORATE SOURCE: Lynx Therapeutics Inc., 3832 Bay Center Place, Hayward, CA 94545, USA.  
CONTRACT NUMBER: RR01614 (NCRR)  
SOURCE: Nucleic acids research, (1998 Feb 15) 26 (4) 1099-106.  
Journal code: 0411011. ISSN: 0305-1048.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199803  
ENTRY DATE: Entered STN: 19980326  
Last Updated on STN: 19980326  
Entered Medline: 19980317

AB The synthesis and hybridization properties of novel nucleic acid analogs, alpha-anomeric oligodeoxyribonucleotide N3'-->P5' phosphoramidates, are described. The alpha-3'-aminonucleoside building blocks used for oligonucleotide synthesis were synthesized from 3'-azido-3'-deoxythymidine or 3'-azido-2',3'-dideoxyuridine via acid catalyzed anomerization or transglycosylation reactions. The base-protected alpha-5'-O-DMT-3'-aminonucleosides were assembled into dimers and oligonucleotides on a solid support using the oxidative phosphorylation method. 1H NMR analysis of the alpha-N3'-->P5' phosphoramidate dimer structures indicates significant differences in the sugar puckering of these compounds relative to the beta-N3'-->P5' phosphoramidates and to the alpha-phosphodiester counterparts. Additionally, the ability of the **alpha-oligonucleotide** N3'-->P5' phosphoramidates to form duplexes was studied using thermal denaturation experiments. Thus the N3'-->P5' phosphoramidate decamer containing only alpha-thymidine residues did not bind to poly(A) and exhibited lower duplex thermal stability with poly(dA) than that for the corresponding beta-anomeric phosphoramidate counterpart. A mixed base decamer alpha-CTTCTTCCTT formed duplexes with the RNA and DNA complementary strands only in a **parallel** orientation. Melting temperatures of these complexes were significantly lower, by 34-47 or 15-25 degrees C, than for the duplexes formed by the isosequential beta-phosphoramidates in antiparallel and **parallel** orientations respectively. In contrast, the alpha-decaadenylic N3'-->P5' phosphoramidate formed duplexes with both RNA and DNA complementary strands with a stability similar to that of the corresponding beta-anomeric phosphoramidate. Moreover, the self-complementary oligonucleotide alpha-ATATATATAT did not form an alpha:alpha homoduplex. These results demonstrate the effects of 3'-aminonucleoside anomeric configuration on sugar puckering and consequently on stability of the duplexes.

Alpha-DNA.IX: **Parallel** annealing of  
 alpha-anomeric oligodeoxyribonucleotides to natural mRNA is  
 required for interference in RNase H mediated hydrolysis  
 and reverse transcription.

AUTHOR: Gagnor C; Rayner B; Leonetti J P; Imbach J L; Lebleu B  
 CORPORATE SOURCE: Laboratoire de Biochimie des Proteines, UA 1191 CNRS,  
 Universite des Sciences et Techniques du Languedoc,  
 Montpellier, France.

SOURCE: Nucleic acids research, (1989 Jul 11) 17 (13) 5107-14.  
 Journal code: 0411011. ISSN: 0305-1048.

PUB. COUNTRY: ENGLAND: United Kingdom  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 198909  
 ENTRY DATE: Entered STN: 19900309  
 Last Updated on STN: 19960129  
 Entered Medline: 19890911

AB ps- and aps-alpha anomeric oligodeoxyribonucleotides were designed to  
 recognize in **parallel** (ps) or antiparallel (aps) orientation two  
 different sites of a 1000 base-long mRNA. Northern blots experiments  
 indicate that only **ps-alpha-oligonucleotides** were able  
 to hybridize to the mRNA target. Furthermore, only **ps-alpha-**  
**oligonucleotides** were able, in a sequence specific way, to protect  
 the mRNA target against RNase H mediated hydrolysis or to inactivate the  
 priming capacity of beta-oligodeoxynucleotide probes in reverse  
 transcription. Formation of **parallel**-stranded mRNA  
**alpha-oligonucleotide** miniduplexes which prevents  
 hybridization of beta-oligonucleotide probes is the most likely mechanism  
 accounting for these results. Use of **alpha-**  
**oligonucleotides** as potential gene control agents is discussed.

L6 ANSWER 8 OF 12 MEDLINE on STN

Inhibition of Moloney murine leukemia virus reverse

transcriptase by alpha-anomeric oligonucleotides.

AUTHOR: Lavignon M; Bertrand J R; Rayner B; Imbach J L; Malvy C; Paoletti C

CORPORATE SOURCE: UA 147 CNRS, U 140 INSERM, Institut Gustave Roussy, Villejuif, France.

SOURCE: Biochemical and biophysical research communications, (1989 Jun 30) 161 (3) 1184-90.

Journal code: 0372516. ISSN: 0006-291X.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198908

ENTRY DATE: Entered STN: 19900309

Last Updated on STN: 19970203

Entered Medline: 19890808

AB After **parallel** hybridization to complementary template RNA, alpha-anomeric oligonucleotides are not primers for Moloney murine leukemia virus reverse transcriptase. As can be expected they are competitors of classical primer oligonucleotides (beta-anomeric). They therefore inhibit the RNA dependent DNA polymerase activity of Moloney murine leukemia virus reverse transcriptase with either homopolymeric or heteropolymeric substrates. Non complementary **alpha-oligonucleotides** display no inhibitory activity. **alpha-Oligonucleotides** are therefore potential candidates for inhibition of retroviral reverse transcriptases by interference with the primer binding sites.



Monoclonal antibodies targeted to **alpha-**

**oligonucleotides**. Characterisation and application  
in nucleic acid detection.

AUTHOR: Cros P; Kurfurst R; Allibert P; Battail N; Piga N; Roig V;  
Thuong N T; Mandrand B; Helene C

CORPORATE SOURCE: Laboratoire des Sondes Nucleiques, bioMerieux, ENS, Lyon,  
France.

SOURCE: Nucleic acids research, (1994 Aug 11) 22 (15) 2951-7.

Journal code: 0411011. ISSN: 0305-1048.

PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199409

ENTRY DATE: Entered STN: 19941005

Last Updated on STN: 19960129

Entered Medline: 19940921

AB The aim of the present study was to test the antigenicity of  
alpha-deoxyribonucleotides in order to develop a new tool for the  
detection of nucleic acid sequences for use in diagnostic applications.  
We describe four monoclonal antibodies (Mabs) which recognize  
alpha-deoxyribonucleotides. Two were raised against a poly(alpha-dT)  
sequence and specifically recognized the alpha-dT nucleotide. Two were  
raised against a sequence containing all four common nucleotides as  
alpha-nucleotides and, surprisingly, only recognized the alpha-dG  
nucleotide. For all four Mabs, no cross reactivity was observed with  
beta-oligonucleotides. These Mabs were reactive with **alpha-**  
**oligonucleotide** sequences whether these sequences were  
single-stranded or hybridized to DNA or RNA. The four Mabs were tested in  
a sandwich hybridization assay that consisted of an **alpha-**  
**oligonucleotide** (for target sequence recognition), one of the four  
Mabs (for recognition of the hybridized **alpha-**  
**oligonucleotide**), and goat anti-mouse antibody conjugated to horse  
radish peroxidase (HRP) (for detection). One of the monoclonal  
antibodies, Mab 2E11D7, was directly conjugated to HRP and used in  
sandwich hybridization to detect PCR fragments of HPV 18 DNA.  
The sensitivity of this reaction was 1 pg of plasmid DNA containing the  
HPV 18 fragment. The specificity of the detection was demonstrated using  
HPV 6/11 and 16 DNA sequences.

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ACCESSION NUMBER: 92346248 EMBASE

DOCUMENT NUMBER: 1992346248

11/2 1146